

EA



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,896	11/18/2003	Jan G. Fager	1504-1034	2815

466 7590 08/24/2005

YOUNG & THOMPSON
745 SOUTH 23RD STREET
2ND FLOOR
ARLINGTON, VA 22202

EXAMINER

NGUYEN, THU V

ART UNIT	PAPER NUMBER
----------	--------------

3661

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,896

Applicant(s)

FAGER ET AL.

Examiner

Thu Nguyen

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 13-22 and 43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5-12 and 23-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/18/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The response to the restriction requirement filed on June 6, 2005 is acknowledged. By this response, the species group I (including claims 1, 5-12, 23-42) has been elected with traverse. Upon considering applicant's argument, the examiner decides to maintain the restriction requirement (refer to section "response to argument" below), accordingly, claims 1, 5-12, 23-42 are examined in this office action.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 5-12, 23-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. In claim 1, line 6, the claimed "within a limited interval" is ambiguous. It is not clear if the "interval" implies the "distance" or the "time slot".
- b. In claim 1, lines 9-11, the claimed "by recording the relative incident positions of the received signals on a surface of the transducer" is ambiguous, it is not clear if the "incident positions" are the positions of the creature in the environment or the position on the transducer where the signals incident on the surface of the receiver?

- c. In claim 23, lines 2, the claimed “it” is ambiguous, it is not clear which device the “it” represent.
- d. In claim 23, line 4, the claimed “and which is formed by the collected amount of signal receiving directions “ is ambiguous. It is not clear if the directions made up the angle?
- e. In claim 29, lines 2-3, the claimed “information is transferred from the locating member to the creature” is ambiguous. It is not clear how the creator received such the information (ie. which device the creature uses to get the information).
- f. In claim 30, lines 2-3, the claimed “is transferred from the creature to the locating member” is ambiguous. It is not clear how (what means, what devices) the creature uses to transferred the information to the locating member.
- g. In claim 39, lines 3-4, the claimed “information is transferred to the creature through a means arranged in the environment and controlled by said computer unit” is ambiguous. It is not clear how the creature received information (what means the creature use to receive the information). Furthermore, the “means arranged in the environment” seems lack of connection with other devices claimed, it is not clear how the “means arranged in the environment” communicates with the creature.
- h. In claim 40, lines 2-4, the claimed “information from said information transferring means in the environment is transferred to the creature” is ambiguous. The claimed “said information transferring means” lacks of antecedent basis. Beside, it is not clear if the “information” is (stored) at the “means arranged in the

Art Unit: 3661

environment” or if the information is sent to the “means in the environment” for the means in the environment to transfer to the creature. Moreover, it is not clear how the creature receive the information.

- i. Other claims are rejected as being dependent on the rejected base claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 5-11, 23-28, 30-35, 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hines et al (US 6,396,413) in view of Lester (US 3,696,384).

As per claim 1, 5, Hines teaches a method for determining the position and orientation of a creature, the method includes: a creature connected to a locating member 20 (fig.1) (col.3, lines 29) that receives incident signal from signal source 18 (fig.1) (col.3, lines 25-32); recording the incident positions of the received signals (col.3, lines 59-67); determining the position or orientation of the creature by the position determined for the receiver (col.4, lines 10-14). Hines does not explicitly disclose that the locating member is a transducer and the signals received are optical signal. However, utilizing transducer for receiving and transmitting signals would have been well known as taught by Lester (col.2, lines 35-36). Furthermore, Lester teaches that it would have been obvious to replace RF signals with optical signals (col.5, lines 20-28; col.2, lines 60-64). It would have been obvious to a person of ordinary skill in the art at the time the

Art Unit: 3661

invention was made to replace the transceiver taught by Hines and the with the transducer and the optical signals as taught by Lester in order to facilitate communicating between the mobile transducers with the stationary transducers.

As per claim 6, Hines teaches measuring the position relative to its preceding position (col.7, lines 31-41).

As per claim 7-9, 28, Hines teaches recording the position of the creature (col.4, lines 1-9). Moreover, mapping the movement of an object when the position of the object, or the relative position of the object is known, and recording a property of the environment would have been well known and obvious matter of design choice.

As per claim 10-11, Hines teaches determining the position of the creature in an unpredictable way (col.7, lines 33-40). Moreover, determining the position of an object moving along a trained predetermined path would have been both well known and obvious matter of design choice.

As per claim 23-27, using direction area receiver for receiving directional signals at different solid angle would have been both well known and obvious matter of design choice.

As per claim 30, Hines teaches transferring information from the creature 20 (fig.1) to the locating member 42 (fig.3) (col.4, lines 47-52).

As per claim 31-34, providing information such as viewing angle, nature of the environment, etc when such the information is available would have been both well known and obvious matter of design choice.

As per claim 35, Hines teaches transferring information to a central computer unit (col.4, lines 10-14).

As per claim 37-42, Hines teaches transferring information from the transducer to a computer unit (col.4, lines 48-60), and vice versa (col.5, lines 27-38). Furthermore transferring data to a creature through a representation unit for communicating with the creature, recording the environment by means of sensors, and determining the position of the creature by the relative incident directions of the signal received would have been well known.

5. Claims 12, 29 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hines et al (US 6,396,413) in view of Lester (US 3,696,384) and further in view of Steinbrecher (US 6,665,631).

As per claim 12, 29, Steinbrecher teaches directing the creature movement (col.14, lines 10-12) by transferring information to the creature (col.13, lines 27-28)

As per claim 36, Steinbrecher teaches transferring data from the central computer to the locating member (col.13, lines 58-64).

Response to Arguments

6. Applicant's election with traverse of species 1 in the reply filed on June 6, 2005 is acknowledged. The traversal is on the ground(s) that claims 13-22 do not exclude species 1. This is not found persuasive because claims 13-22 direct to different species and different subcombination of the species 1. Whereas the species I direct to measuring the location and orientation of a moving creature, claim 13 directs to different aspect such as locating a phenomenon using pointing devices, claim 16 directs to comparing the position with a reference to determine state eligible for recording purpose, and claim 20 directs to a creatures putting mechanical contact of the transducer to an object the positions of which is to be determined. Measuring the position and orientation of the creature set forth in species 1 does not require the features set forth in claims 13-22, therefore the restriction is proper.

The requirement is still deemed proper and is therefore made FINAL.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (571) 272-6967. The examiner can normally be reached on T-F (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 15, 2005


THU V. NGUYEN
PRIMARY EXAMINER